

In the Claims

1. (Currently Amended) A method of measuring frequency interference between a plurality of cell sites in a wireless telecommunications system, the method comprising:
- selecting a frequency in a first cell site to be used as a beacon frequency, wherein selecting a frequency includes selecting a frequency carrying the least amount of traffic across a plurality of cell sites and protecting the frequency from carrying traffic;
- activating the beacon frequency in the first cell site;
- recording, at a telecommunications switch, a signal strength of the beacon frequency as measured by a first wireless device operating in the first cell site and a signal strength of the beacon frequency as measured by a second wireless device operating in ~~another~~ a second cell site;
- and
- determining the frequency interference between the first cell site and the ~~other~~ second cell site based on the signal strengths.
2. (Currently Amended) The method of claim 1, wherein the first and second cell sites are adjacent cell sites.
3. (Canceled)
4. (Original) The method of claim 1, wherein measuring the frequency interference includes constructing a carrier/interference matrix.
5. (Original) The method of claim 1, further comprising de-activating the beacon frequency after the signal strengths are recorded.
6. (Currently Amended) The method of claim 1, wherein selecting a frequency includes selecting a frequency that is a frequency carrying the least amount of traffic across a plurality of cell sites ~~least-used frequency along with adjacent lower and upper channels~~.
7. (Original) The method of claim 1, wherein selecting a frequency includes selecting a guard frequency.
8. (Original) The method of claim 1, further comprising removing a frequency adjacent the beacon frequency from availability for use in the system by wireless device users.

9. (Original) The method of claim 1, further comprising repeating the method for all cell sites in the telecommunications system.

10. (Original) The method of claim 1, further comprising adding the beacon frequency to a list of frequencies.

11. (Original) The method of claim 10, wherein adding the beacon frequency to a list of frequencies includes adding the beacon frequency to a mobile assisted handoff (MAHO) list in a telecommunications switch.

12. (Currently Amended) The method of claim 1, further comprising determining whether the first cell site and the ~~other~~ second cell site may be selected for frequency re-use based on determining the frequency interference.

13. (Original) The method of claim 1, further comprising selecting a trigger frequency to simulate a hand-off situation for the second wireless device.

14- 25 (Canceled)